Appln. No. 10/045,692
Response dated August 23, 2005
Response to Office Action of February 23, 2005

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Amendments to the Claims

Listing of Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application.

1.   (Currently amended)   A method for improving the internal computer throughput rate of network communicated data comprising:

integrating a software library with a commercial off-the-shelf (COTS) operating system (OS) of a computer, wherein the software library comprises a network interface unit (NIU) driver and an integrated protocol processing (IPP) loop;

opening the NIU driver in response to a notification that network communicated data directed to an application has been received by a NIU of the computer;

transferring the network communicated data from the NIU of the computer to a COTS OS memory buffer;

mapping an application memory buffer to the COTS OS memory buffer, wherein the mapping is accomplished by the NIU driver;

executing standard communication protocols on the network communicated data to obtain application data, wherein the executing of the communication protocols is accomplished using the IPP loop;

transferring the application data to the COTS OS memory buffer; and

processing the application data at the application, wherein the application data is acquired by the application from the application memory buffer.

transferring network communicated data from a standard network interface device to an application address space with only one physical copying of the data;

executing communication protocols in an integrated protocol processing loop by having the integrated protocol processing loop perform all protocol data manipulation functions on the data in a single loop on computer word size segments of the data;

calculating communication protocol checksums one computer word size of data at a time within the integrated protocol processing loop; and

address mapping of the data occurs in response to call functions, where the operating system's calls are bypassed.